

KNOWLEDGE MANAGEMENT AND COMPETITIVE ADVANTAGE OF FLOWER FARMS IN
NAKURU COUNTY, KENYA

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Abstract: Managing the knowledge of an organization contributes to its competitive advantage. It has been tested elsewhere that knowledge management relates to competitive advantage, but not to farms in Nakuru County, Kenya. The project therefore set out to assess how knowledge management relates to competitive advantage as regards to farms doing flower growing in the identified area of Nakuru County in Kenya. This study mainly concerned evaluation of the effects of knowledge management dimensions, which included conversion, application, acquisition and protection on competitive advantage. This study applied descriptive survey research approach. The target population included 839 workers from 14 flower farms in Molo County. Consistency of factors was tested in an attempt to understand the research tool reliability. Content validity was determined by the researcher in collaboration with the supervisor and the opinion of an expert and tests on the instruments. Data was collected by questionnaire. The obtained data evaluated using SPSS to derive descriptive statistics, which included measures of central tendency, tables and graphs. The descriptive statistics affirmed Knowledge acquisition, knowledge conversion, knowledge application, knowledge protection, and competitive advantage among the firms. Inferential regression analysis was done, in which the independent variables were the knowledge management dimensions that included knowledge acquisition, knowledge conversion, knowledge application and knowledge protection, while the dependent variable was competitive advantage. The tests results showed that 25.4% of the total variation in the measurement of competitive advantage was explained by knowledge management. Further, the F-value of 6.716, p-value (0.000) < 0.05 level of significance (2-tailed) indicated that there was a statistically significant relationship between knowledge management and competitive advantage at the 95% confidence level. Thus, knowledge management influenced competitive advantage among the flower firms. The study will help flower industry stakeholders, including flower farm workers and managers understand the value of establishing knowledge management skills for a sustainable competitive advantage. Research results can act as a self-assessment tool for knowledge management capabilities to increase an organization's competitive advantage. The research findings and recommendations will be of great relevance to flower farm management to understand the value of knowledge management capabilities and how they improve the efficiency and innovation of their operations.

Keywords: Knowledge Management and Competitive Advantage

1.1 Introduction

Jackson, Hitt&De Nisi (2003), assert that the competing environment favors firms with impalpable resourcing that are liable to provide them competitive advantage, of which human capital, the most difficult to replicate, is generally the most important. We believe there is in today's dynamic world of rapid and unexpected change, physical assets can now be freely accessed, imitated and exchanged. Consequently, organizations compete on the basis of novel approaches, which has shifted from general factors such as pricing to relying on intangible factors such as knowledge. Thus, Walters, Halliday and Glaser (2002) contend that knowledge is an important strategic good and an invaluable resource. Hence, competitive advantage derived from people, business, a government and even other forms of service organizations are increasingly dependent on its ability to use information consistently. From an enterprise knowledge base perspective, managing knowledge base resources is key to maintaining competitive advantage and improved performance (Jackson, Hitt& De Nisi, 2003). Knowledge management specifically supports staff sharing of resources, activating and expanding the knowledge, especially to strengthen knowledge base within an organization, ultimately helping them to be more innovative, act quickly and be

competitive organization with (Aravi and Leidner, 2001).

Knowledge, as imputed by Drucker (2005), is an asset that offers a competing organization unique advantage. Good knowledge management helps companies generate new ideas and new knowledge, make information available, apply existing knowledge, and communicate among knowledge workers (Plessis, 2007; Huang & Li, 2009; Lin & Lee, 2005). It is clear that researchers and management professionals are paying increasing attention to knowledge management, the process of using, acquiring and sharing information for competitive advantage (Davenport & Prusak, 2008). Organizations that recognize their wealth of knowledge possess valuable and unique resources that are hard to emulate and maybe leveraged for creating competitive advantage. Therefore, the means to acquire, maintain, and utilize knowledge resources can lead to higher levels of organizational success (Alavi and Leidner, 2001). Firms can also do this because of ability they have for generating innovative knowledge and use existing infrastructure as conduits of effectiveness and efficiency better than the competition (Tippins & Sohi, 2003; Hansen et al., 2009; Davenport et al., 2008; Jags, 2009; Zack, 2009). Knowledge is essential to the Kenyan floriculture industry which over the years has demonstrated consistent excellence in yield and quality.

Competitive advantage is understood as the special position an organization has over its competitors through its resource deployment models (Hofer and Schneider, 1978). Porter (1985) asserts that competitive advantage ought to be the aim of strategist accompanied with basic logic to achieve better performance, and that gaining advantage naturally leads to higher performance. Competitive advantage may arise by executing a novel strategy not employed by present or future rivals, or by surpassing a strategy likewise used by competition or maintained by them and that can be sustained when other firms cannot reproduce the advantages of this technique. approach (Barney 1991). (Barney 1991). According to Heisig (2014), the capacity to mobilize and exploit knowledge base resources in connection to other resources and skills is known as knowledge management competency. Organizations should establish a knowledge management function to support various critical organizational operations and activities. (Gold, Malhotra & Segars, 2001) provide a complete model of the capabilities as knowledge management infrastructure function, Knowledge Management Process Function are the two primary elements of this paradigm that make up an organization's knowledge management capacity.

The largest and oldest florist business in Africa, the Kenyan florist business prospered very quickly in its early years and has remained fairly stable ever since, with an average annual growth rate of 20% (Floriculture in Kenya, 2014). There are approximately 150 flower growers in Kenya, many of which are medium to large commercial enterprises (Ksoll et al. 2009). Most of Kenya's flower exports are destined for the European market. Cut flowers are not only an important source of foreign exchange earnings, but this business also generates direct and indirect employment. This is particularly important in countries like Kenya, where unemployment is high (Mwangi, 2007). Kenya's horticulture business has grown to be the second largest producer of foreign exchange, employment and food supply over the last decade. Kenya's ideal tropical and temperate climatic conditions are suitable for growing fruits, vegetables and flowers. It is now a major exporter of vegetables to the European Union (Dolan and Humphrey 2000). Horticulture has proven to be one of the fastest growing sub-sectors of Kenya's export economy, growing at over 7% per annum. In 2005, the value of exports of horticultural products increased by about 19.1% over the value of exports in 2004 (Dolan and Humphrey, 2000). Kenyan companies are falling behind in this information revolution, creating barriers to competition (Teece, 2000; Nyawade, 2005). These problems can affect market share. Markets, technology, consumers, and competition are constantly changing, requiring farms and businesses to constantly innovate to remain competitive and sustainable. Meeting the global demand for flowers requires a complex and delicate balance in the supply chain of workers, growers, wholesalers, airlines, freighters, retailers, florists and supermarkets. Moving something as fragile as a flower arrangement from one continent to another without crushing or wilting it is a difficult task for engineering and knowledge management.

2.1 Theoretical Literature Review

This research builds on the institutional theory put forward by his Fogarty in 1996. Institutional theory aims to provide a broad and complex view of organizations and their activities, and to clarify how they are shaped by processes inside and outside them. Institutionalism and adaptive theory are other names for institutional theory. It is predicated on the fundamental idea that the organizational environment is defined by the development of guidelines and specifications that particular organizations must adhere to in order to be accepted and given

legitimacy. This theory aims to clarify how the organizational environment's cultural, political, and social factors affect organizational structures and human behaviour (Fogarty, 1996). Intellectual property is seen by resource-based theorists as a valuable business resource. To manage and increase social capital, boost organizational performance, and protect competitive advantage, knowledge management mechanisms and practices including knowledge acquisition, knowledge transformation, and knowledge application have been deployed. Knowledge is viewed as an organization's primary resource in the knowledge-based enterprise approach (Grant, 1996). Resource-based view theory views knowledge as a resource and an asset, and therefore an effective system of knowledge management.

Knowledge Based View (KBV) of the Firm Model

The corporate knowledge-based perspective has been considered an emerging stream of resource-based vision theory, the latter of which finds its most general embodiment in the idea of core competencies. Resource-based theories distinguish between a firm's endogenous resources (including physical assets, infrastructure, patents, licenses, and reputation) and the semantic competitive dynamics contexts such as location, regulatory variables and technological compatibility requirements (Piotrowski, 2008). One's knowledge can be absorbed by many methods, the most recognized of which are: transmission, direction, sequence and routine (Grant, 1997). While emphasizing "knowledge transfer" as a key technique by which companies manage knowledge, learning from another individual is rarely an effective approach to information integration, because it reduces the effectiveness of need-to-know expertise. Experts in a subject area are committed to "managing" rules, guidelines and operating procedures for disseminating information that governs the behavior of non-experts and experts from the field. other areas. At a more complex level, there are integrated systems that allow the person to coordinate their application of information without direct transmission. In theory, this could be done through simple "sequencing". At a more advanced level, organizational habits are frequent patterns of coordinated activities involving many people (Grant, 1997), which in some way involve the application of knowledge.

2.2 Empirical Literature Review

Adam et al. (2019) investigated the relationship between knowledge sharing and organizational competitive advantage. The cost and quality of competitive advantage were significantly impacted by knowledge sharing, while neither factor was impacted by knowledge acquisition. This research focuses on industrial businesses in Sudan and how sharing and acquiring knowledge impact organizational competitiveness. In contrast, contemporary research on the connection between knowledge management and competitiveness emphasizes the opposite.

Jackson (2012) explored utilization of tacit knowledge for competitive advantage and how sales organizations may gain competitive advantage by finding, capturing and conveying their underlying tacit knowledge. The quantity of tacit knowledge possessed by a sales team was theorized to positively link to performance. The quantity of tacit knowledge possessed by account managers engaged in different team configurations and geographic locations was assessed. The results indicated that tacit knowledge possessed by the team was a key factor of the team's success. Fadhilah (2020) examined knowledge management strategies and competitive advantage via innovation. The goal of the research was to give insight on capabilities of knowledge management methods in building competitive advantage of organization via innovation. The research concluded that the practice of knowledge management as knowledge distribution is vital to empowering competences and abilities of the workforce for innovation. The research also indicated that knowledge management methods confront several barriers, which hamper their successful implementation.

In order to develop Effective electronic health declarations in the healthcare system, Gagnon et al. (2008) examined knowledge applications for the best implementation of e-health in the context of the health sector. external knowledge sharing and the consequent increased risk of knowledge leakage pose a strategic dilemma in inter-organizational collaborations and that in settings of highly intensive competition, organizations need to gain competitive advantages through the process of inter-organizational knowledge sharing thereby making the organization more prone to risks of unintended knowledge leakage. The literature has demonstrated that information protection strategies in knowledge exchange between organizations are more important as competition evolves. Results from a sample of 126 firms in information-intensive industries indicate that knowledge protection has a positive linear effect on knowledge sharing and that protection methods become

relevant. In addition, these results suggest that managers need to consider whether protection systems are necessary and whether the expected benefits can match the costs of implementation. Hutten, 2017).

3.0 RESEARCH METHODOLOGY

In order to determine how knowledge management skills, affect the competitive advantage of horticulture farms in Molo County, this study used a descriptive survey research methodology. The purpose of descriptive study was to outline the circumstances and characteristics around an individual, a group, or a scenario (Kothari, 2006). Demographics relating to respondents were obtained from workers on flower farms that have been in existence for more than 5 years. There are fourteen flower farms with a population of 839 workers. Singleton (2003) suggests that the optimal environment allows for quick relations with informants. The Molo sub-district was chosen because it was home to horticultural farms that have been operating for more than five years. Along with regular workers, managers and supervisors in charge of technology, human resources, operations and marketing will be the survey respondents. To guarantee that each of the many subgroups was properly represented in the sample, stratified random sampling methods was utilized to choose respondents from flower farms before using a random sampling methodology. Respondents were chosen from the stratified using a simple procedure. According to Gay (2002), random sampling is the greatest sampling technique since it gives every member of the population an impartial and equal chance of being included in the sample. Sample size was all workers from fourteen flower farms collected from employee data submitted by the farm management.

To get a representative sample size from the population size, Stattek (2015) provided the following sampling formula, which was used in the research.

$$n = \frac{N}{1 + N(e)^2}$$

Where: n- Sample Size N-Population Size e- Level of Precision
at 90% Confidence level.

Employing the above formula, the sample size will be:

$$\text{Thus, } n = \frac{839}{1 + 839(0.1)^2} = \frac{839}{9.4} = 89$$

The sampling frame therefore had 89 respondents selected from the target population of 839. To obtain an appropriate sample size for each stratum, the study used the following proportionate stratification: $n_i = \left(\frac{n}{N}\right)N_i$

Where:

n_i =Sample of the strata

n = Sample Size

N = Population

N_i =Population of each Strata

4.1 RESULTS AND DISCUSSION

The findings indicate that the respondents agreed that the flower firms had a mechanism for acquiring Knowledge on customers ($\mu = 4.26$, $SD = 0.852$), the flower firms also had a mechanism for acquiring knowledge on new products/services within the industry ($\mu = 3.90$, $SD = 1.238$), and that the flower firms had a mechanism for acquiring knowledge exchange ($\mu = 4.12$, $SD = 0.856$), and that Knowledge acquisition had an effect on competitive advantage ($\mu = 3.81$, $SD = 1.197$). The findings showed there was agreement amongst the respondents of knowledge acquisition ($\mu = 4.023$, $SD = 1.036$) activities within the firms. The high agreement on knowledge acquisition mechanisms suggests that the flower firms are proactive in seeking external and internal knowledge. This proactive approach can lead to a better understanding of customer needs, industry trends, and collaborative learning. Such mechanisms can contribute to a competitive advantage by ensuring that the firms are well-informed and adaptable. Studies like Fadhilah (2020) corroborate these findings by highlighting the importance of customer knowledge and industry trends in gaining a competitive edge.

The findings indicate that respondents agreed that flower firm had a mechanism for converting knowledge ($\mu = 4.26$, $SD = .907$), and that flower firm had a mechanism for filtering knowledge ($\mu = 4.21$, $SD = 1.007$), a mechanism for replacing outdated knowledge ($\mu = 4.21$, $SD = .945$), a mechanism for organizing (storing/filing) knowledge ($\mu = 3.82$, $SD = 1.416$), and that Knowledge conversion had an effect on competitive advantage ($\mu = 3.99$, $SD = 1.227$). The average mean scores ($\mu = 4.098$, $SD = 0.829$) shows that respondents agreed with Knowledge conversion activities in their respective firms. The agreement on knowledge conversion mechanisms indicates that the flower firms are actively engaged in managing their knowledge resources. Effective conversion, filtering, and replacement mechanisms enable the firms to ensure that the knowledge they possess is relevant, up-to-date, and applicable. Proper organization of knowledge enhances accessibility and usability, promoting informed decision-making. Mills and Smith (2011) highlights the importance of knowledge conversion for innovation and organizational learning. On the other hand, studies like Ogbo et al (2019) provide a critical perspective on the challenges of knowledge conversion and potential limitations.

Knowledge Management Dimensions

Statements	Mean	Std. Deviation
Knowledge Acquisition	4.023	1.036
Knowledge Conversion	4.098	0.829
Knowledge Application	4.08	1.003
Knowledge Protection	4.143	0.960
Average composite scores	3.86	0.972

Researcher, 2023

The correlation coefficient of 0.504 indicates a positive relationship between knowledge acquisition, knowledge conversion, knowledge application and knowledge protection with competitive advantage. The R-Squared statistics with a value of 0.254 suggests that 25.4% of the total variation in the measurement of competitive advantage is explained by knowledge management. Further, the F-value of 6.716, p-value (0.000) < 0.05 level of significance (2-tailed) infers a statistically significant relationship between knowledge management and competitive advantage at the 95% confidence level.

Table 4.14: Model Summary^b

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics				
					Change	F Change	df1	df2	Sig. F Change
1	.504 ^a	.254	.216	.143	.254	6.716	4	79	.000

A. Predictors: (Constant), Knowledge Protection, Knowledge Conversion, Knowledge Application, Knowledge Acquisition

B. Dependent Variable: Competitive Advantage

Researcher, 2023

4.1.1 Regression ANOVA

One way analysis of variance (ANOVA) was undertaken to test whether there was significant difference between the population means. The dependent variable in this case was competitive advantage and the independent variables were knowledge acquisition, knowledge conversion, knowledge application and knowledge protection. Table 4.15 indicate that there was statistically significant difference in knowledge acquisition, knowledge conversion, knowledge application, knowledge protection and competitive advantage ($F_{1,4} = 6.716$, $p (0.00) < 0.05$), which suggests that the model was fit to predict competitive advantage. Hence, knowledge management is good predictor of competitive strategy. The findings indicate that there was a statistically significant difference in knowledge acquisition, knowledge conversion, knowledge application, knowledge protection, and competitive advantage. Additionally, the results suggest that the model used was fit to predict competitive advantage, leading to the conclusion that knowledge management is a good predictor of competitive strategy. However, the significant differences suggest that variations exist among the levels of knowledge acquisition, conversion,

application, and protection. These differences might relate to the extent to which these knowledge management aspects practices or how they are emphasized in different firms. It's important to understand these variations to tailor strategies that effectively leverage these knowledge management processes. In addition, the statistically significant model fit implies that the combination of knowledge acquisition, conversion, application, and protection is a meaningful predictor of competitive advantage. This suggests that firms that effectively manage these knowledge processes are more likely to achieve a competitive edge in their respective industries. This underscores the strategic importance of knowledge management in shaping a firm's competitive positioning. The conclusion that knowledge management serves as a good predictor of competitive strategy highlights that firms with strong knowledge management practices are more likely to achieve and sustain a competitive advantage. This supports the notion that leveraging knowledge effectively is fundamental for strategic success. A notion that is supported by Nkemfiadu et al. (2019). although, contradictory views might be found in research like Ylirenko (2001), which addresses the challenges of converting knowledge into strategic action.

Table 4.15: ANOVA^a

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	.553	4	.138	6.716	.000 ^b
	Residual	1.627	79	.021		
	Total	2.180	83			

A. Dependent Variable: Competitive Advantage

B. Predictors: (Constant), Knowledge Protection, Knowledge Conversion, Knowledge Application, Knowledge Acquisition

Researcher, 2023

4.1.2 Regression Coefficients

A look at the knowledge acquisition(B = 0.181, t = 0.988, p = 0.326), knowledge conversion (B = 0.156, t = 1.263, p = 0.210), knowledge application(B = -0.006, t = -0.034, p = 0.973), and knowledge protection(B = 0.251, t = 1.763, p = 0.082) data in table 4.16 shows that none of these dimensions have a statistically significant effect on competitive advantage, however, the results in table 4.16 indicates that knowledge management always has a statistically significant minimum influence on competitive advantage (B-constant = 1.109, p (0.004 < 0.05), which has also been deduced from table 4.14 analysis data. Thus, the following regression equation presented indicate that other factors being constant a unit change in knowledge acquisition will result in competitive advantage equivalent to 0.181, similarly a unit change in knowledge conversion will result in competitive advantage equivalent to 0.156 and 0.251 for knowledge protection, however, a unit change in knowledge application will result in competitive advantage equivalent to negative 0.06.

Hence: Competitive Advantage = 1.109 + 0.181 X₁+ 0.156X₂ + 0.251X₃ – 0.06X₄

Whereby: X₁ = knowledge acquisition, X₂= knowledge conversion, X₃= knowledge protection, X₄ = knowledge application. While individual dimensions of knowledge management (acquisition, conversion, application, protection) may not have a significant impact on competitive advantage, the collective influence of knowledge management as a construct is statistically significant. This suggests that the synergistic effect of managing knowledge in a comprehensive manner is what truly contributes to competitive advantage. Jackson et al. (2003) align with these findings, emphasizing the role of integrated knowledge management practices. Contradictory views by Jacome et al. (2002) discuss challenges in effectively translating knowledge into strategic action. The non-significant effects of individual dimensions on competitive advantage suggest that these dimensions may not directly drive competitive advantage on their own, an indication that the value comes from the interaction between these dimensions rather than their isolated effects. Mills et al. (2011) concur with these findings by emphasizing the interconnectedness of knowledge management dimensions, although there are limitations of knowledge applications driving organizational success in itself.

Given the significance of knowledge acquisition, conversion, application and protection to company performance, the majority of the firms state that their leaders support and encourage these activities. The body of existing literature (Adam et al., 2019; Jackson, 2012) demonstrates that successful knowledge management depends on

supportive leaders and a supportive work environment. Efforts to find, use, and share professional intellect will be more successful when executives reward staff for grasping the full knowledge process and applying creativity and intuition at work. The results with the analyzed enterprises show that there is already leadership support in place in the organizations and that knowledge management is effectively facilitated for competitive advantage.

Most responding organizations already have acquisition processes in place, demonstrating the significance of acquisition processes as one of the knowledge process capabilities. A higher percentage of respondents concur that they have established processes for gathering information about their customers, creating new knowledge from existing knowledge, and determining knowledge about new products/services within the industry. This backs up the body of research that has already been done (Jackson, 2012), which recognized the acquisition process as a knowledge management competence.

Given their response, the majority of firms have systems in place for moving knowledge from individuals to the organization, from the organization to individuals, and for transforming competitive intelligence into action plans. This backs up an assessment of the literature and research (Fadhilah, 2020). That highlighted an organization's capacity for knowledge conversion or transfer as essential to the success of knowledge management. This suggests that conversion process acceptance is a crucial element of gaining competitive advantage.

According to the firms' responses, the majority of them use knowledge to create new goods and services, put what they've learned from experiences and mistakes to use, address new issues, and boost productivity. This is consistent with the results of empirical research and a literature analysis (Ode & Ayavoo, 2019) which indicate that the process or usage of knowledge application is crucial for knowledge management effectiveness and, consequently, competence.

Most businesses said that robust policies and processes safeguard knowledge from theft from outside the company, from improper use both inside and outside the organization, and from trade secret theft. Literature emphasizes the value of safeguarding knowledge against improper use or theft by employing a range of laws, norms, procedures, incentives, and technology (Gagnon et al., 2008). Thus, knowledge protection procedure becomes a crucial competency as a result.

Although the firms' innovative techniques were confirmed, they were unable to determine whether they launched new products and services with a lower success rate than rivals. They claim that their products and services are viewed as unique by their clients, continuously enhance their business processes, and frequently provide new products and services at the leading edge of technology. Additionally, the majority of businesses can reach all of their clients and have a very broad demographic appeal. They also use marketing and advertising strategies to get more people to do business with them. The body of research suggests that innovation leads to sustainable competitive advantage, albeit it can also result from the four knowledge management processes of acquisition, conversion, application and protection (Hutten, 2017). Therefore, effective knowledge management techniques encourage creativity in organizations, which has an impact on performance (Dedeche, 2014). Thus, the study's participants showed that they have knowledge management skills and practices, which have been found to influence competitive advantage in their respective firms.

Competitive advantage on their own, an indication that the value comes from the interaction between these dimensions rather than their isolated effects. Mills et al. (2011) concur with these findings by emphasizing the interconnectedness of knowledge management dimensions, although there are limitations of knowledge applications driving organizational success in itself.

In general, the findings suggests that leaders in the organizations support and encourage knowledge management activities. Literature has shown that supportive leadership and a conducive work environment are crucial for successful knowledge management. Adam et al., 2019; Jackson, 2012). These points are reinforced by citing Lee et al. (2000) who emphasize leadership's role in creating an environment conducive to knowledge sharing. Jackson (2012) also discusses how leadership support contributes to effective knowledge management practices. The presence of well-established acquisition processes in firms is highlighted, emphasizing their importance for knowledge management competence. The acquisition process is recognized as a knowledge management competence (Jackson, 2012). Jackson (2012) further provides insights into the significance of knowledge

acquisition processes for organizational success.

The findings demonstrate that firms have processes for knowledge conversion and transfer, which is essential for knowledge management success and gaining competitive advantage. The conversion process acceptance is crucial for competitive advantage (Fadhilah, 2020). Fadhilah (2020) emphasizes the importance of knowledge conversion in the context of knowledge management effectiveness and competitive advantage, and delves into how conversion processes contribute to organizational performance.

The study indicates that firms are utilizing knowledge for various purposes, which aligns with literature indicating that the usage of knowledge application is crucial for effective knowledge management (Ode & Ayavoo, 2019). The firms have robust policies and processes for safeguarding knowledge. Literature underscores the value of protecting knowledge through legal, normative, and technological measures (Gagnon et al., 2008). The findings also indicate that firms' innovative practices influence their competitive advantage. The connection between innovation, knowledge management processes, and competitive advantage is well-established (Hutten, 2017; Dedeche, 2014).

5.0 CONCLUSION AND RECOMMENDATION

The study found that flower firms had a mechanism for acquiring Knowledge on customers and a mechanism for acquiring knowledge on new products/services within the industry. The flower firms had a mechanism for acquiring knowledge exchange, thus affirming Knowledge acquisition by the firms. The flower firms had a mechanism for converting knowledge and filtering as well as replacing outdated knowledge, and a mechanism for organizing and storing knowledge, which affirmed that Knowledge conversion had an effect on competitive advantage. It was found that the workers were able to identify the client segments that place a high value on the product attributes provided, knew which business unit's core capabilities were most important in creating value for existing or new market/client segments, and competencies and process that were needed to enhance or develop better services to client segments, there were also processes for identifying and developing products that provide a good match-up between firm's capabilities and market opportunities., therefore affirming knowledge application by the firms. The study found that workers were encouraged to treat mistakes as opportunities for learning and improving rather than as occasions for placing blame. There was easy access to information of interest to clients and to the people, who were encouraged own the overall outcome of the projects rather than focusing only on their sphere of responsibility. In addition, clients were kept fully involved in the planning and execution of projects. Therefore, affirming knowledge protection by the firms. The study found that the flower firms enjoyed a competitive advantage, leveraged knowledge management mechanism to enhance profit margins, had a large market, and offered quality products which affirm the existence of competitive advantage among the firms. Inferential regression analysis was done, in which the independent variables were the knowledge management dimensions that included knowledge acquisition, knowledge conversion, knowledge application and knowledge protection, while the dependent variable was competitive advantage. The tests results showed that 25.4% of the total variation in the measurement of competitive advantage is explained by knowledge management. Further, the F-value of 6.716, p-value (0.000) < 0.05 level of significance (2-tailed) indicated that there was a statistically significant relationship between knowledge management and competitive advantage at the 95% confidence level. One way analysis of variance (ANOVA) was undertaken to test whether there was significant difference between the population means. The results showed that indeed there was statistically significant difference in knowledge acquisition, knowledge conversion, knowledge application, knowledge protection and competitive advantage ($F_{1,4} = 6.716$, $p(0.00) < 0.05$), suggesting that knowledge management was a good and fit predictor of competitive advantage. The study further found that knowledge management always had a statistically significant minimum influence on competitive advantage (B-constant = 1.109, $p(0.004 < 0.05)$), however, it was also found that other factors being constant a unit change in knowledge acquisition resulted in competitive advantage equivalent to 0.181, similarly a unit change in knowledge conversion resulted in competitive advantage equivalent to 0.156 and 0.251 for knowledge protection, but a unit change in knowledge application resulted in competitive advantage equivalent to negative 0.06. In summary, the results revealed that there was significant effect of knowledge management on competitive advantage.

5.1 Conclusions

This study focused on determining the impact of knowledge management on the competitiveness of farmed followers in Nakuru County. The general objectives were to establish the effect of knowledge acquisition on competitive advantage, the influence of knowledge conversion on competitive advantage, the effect of knowledge application on competitive advantage, and the effect of the level of knowledge protection on competitive advantage. As a result of the summary discussed in the previous section, the study concludes that knowledge acquisition has an effect on competitive advantage, knowledge conversion has an effect on competitive advantage, knowledge application has an effect on competitive advantage, and knowledge protection has an effect on competitive advantage. Thus, knowledge management has an influence on competitive advantage among the flower firms in Nakuru County.

5.2 Recommendations

The recommendations that are presented in the following sections are aligned to theoretical contribution and implications to practice.

5.2.1 Theoretical Contribution

This study attempts to expand extant literature in knowledge management by making several significant contributions. First, the study provides a critical review of the existing literature on knowledge management and competitive advantage, leading to a detailed overview of relevant studies from which the research gaps were identified and a holistic theoretical model developed.

This model represented one of the first endeavors to combine the Institutional theory, resource-based view, knowledge-based view and dynamic theory of organizational knowledge to investigate a variety of integrated and complementary knowledge management components and their impacts on competitive advantage. Specifically, the study confirms that knowledge acquisition, knowledge conversion, knowledge application and knowledge protection are four distinct but related components which constitute the overall knowledge management capability of the firm. This research in particular emphasizes the positive correlations between knowledge management and competitive advantage. In addition, the model stresses the importance of knowledge management in organizational competitive advantage.

5.2.2 Practical Implication

The results of this study could help us develop more effective knowledge management techniques and strengthen our competitive advantage in the flower-producing sector. Effective knowledge management systems, in particular, increase learning opportunities for workers' professional development and advancement, foster cohesive teams, and create welcoming work environments. These benefits might boost productivity and increase employee loyalty. The results may also provide company executives with best practices that result in fresh approaches to creating, preserving, and sharing information in order to enhance continuity across the organizational structure of the flower industry.

One of every company's strategic goal is to obtain a competitive advantage. Today's tumultuous, dynamic surroundings need businesses to develop strong dynamic skills by putting a variety of knowledge management activities into practice. These businesses must do this to stay sustainable and competitive. Since this will increase the firm's organizational competitiveness, developing and successfully utilizing these competencies must be the top priority for senior management. Senior management needs to publicly promote the importance of knowledge to business performance, ensure that staff members are aware of this, and, most crucially, motivate them to engage in on-the-job training, learning, and knowledge transfer.

REFERENCES

1. Ansoff, H and M C Donnell E, (1990) *Implanting Strategic Management*, Prentice Hall: Cambridge, UK, 2nd Edition
2. Beveren, J. V. (2002). A model of knowledge acquisition that refocuses knowledge a.management. *Journal of Knowledge Management*, 61(1), 18–22.

3. Brule, J.E., and Blount, A. (1989). Knowledge Acquisition, McGraw-Hill, New York.
4. Cantner, U.; Joel, K.; and Schmidt, T. (2009). The effects of KM on innovative success– an empirical analysis of German farms, *Economic studies*, 1(16)
5. Carneiro, A. (2000), How does KM Influence innovation and competitiveness? *Journal of knowledge management*. 4 (2)
6. Cascella, V. (2002). Effective strategic planning. *Quality Progress*, vol. 35, no. 11, pp. 62-7.
7. Cepeda, G.& Vera, D. (2007). Dynamic capabilities and operational capabilities: a knowledge management perspective. *Journal of Business Research*, vol. 60, no. 5, pp. 426-37.
8. Choi, B.; and Lee, H. (2002), KMstrategy and its link to knowledge creation process, *Expert Systems with applications* 4 (23).
9. Choi, B.; and Lee, H. (2003), KMEnablers, Processes, and Organizational Performance: An i. Integrative View and Empirical Examination *Journal of Management Information Systems*, 20 (1)
10. Chuang, S.H. (2004), A resource-based perspective on KMcapability can competitive advantage: an empirical investigation, *Expert System with applications*. 4 (27)
11. Connor, K.R.; and Prahalad, C.K. (2006), A resource-based theory of the firm: knowledge versus opportunism”, *Organization Science*, 7 (5)
12. Cohen, W.M. and Levinthal, D.A. (1990), Absorptive capacity: a new perspective on learning and innovation, *Administrative Science Quarterly*, Vol. 35 No. 1, pp. 128-52.
13. Cooper, C.; and Beasley, G.A. (2008), Defining KM activities: towards consensus, *Journal of knowledge management*, 12 (3)
14. Cooper, J.R. (2008). A multidimensional approach to the adoption of innovation, *Management Science*, Vol. 36 (8.)
15. Corsoa, M, Martinib, A, Pellegrinib, L, Massac, S. & Testac, S.(2006). Managing dispersed workers: the new challenge in knowledge management. *Technovation*, vol. 26, no. 5/6, pp. 583-94.
16. Cronbach, L.J. (1951). Coefficient Alpha and the Internal Structure of Tests”, *Psychometrika*, Vol. 16 (33)
17. Davenport, T.H.&Klahr, P. (1998). Managing customer support knowledge. *California Management Review*, vol. 40, no. 3, pp. 195-208.
18. Damanpour, F. (2001). Organizational innovation: a meta-analysis effect of determinants and moderators, *Academy of Management Journal*, Vol. 3(34)
19. Darroch, J. (2003), Developing a measure for KMbehaviors and practices, *Journal of knowledge management*, 7. (5)
20. Darroch, J. (2005), Knowledge management, innovation and firm performance, *Journal of knowledge management*, 9 (3)
21. Darroch, J; and McNaughton, R. (2003), Beyond market orientation KMand the innovativeness of New Zealand farms, *European journal of marketing*, .37 (3).
22. Darroch, J; and McNaughton, R., (2002), Examining the link between KMpractices and types of innovation, *Journal of intellectual capital*, .3. (3)
23. Davenport, T.H; and Prusak, L. (2008), *Working Knowledge*. Harvard Business School Press.
24. Davenport, T.H.; and Klahr, P. (2008). Managing customer support knowledge. *California Management Review* 3 (40).
25. Deshpande, R., Jarley, U. & Webster, F. (2003), Corporate culture, customer orientation, and innovativeness in Japanese farms: A quadrat analysis. *Journal of Marketing*, Vol. 3 (57)
26. Dobni, C. B. (2008), Measuring innovation culture in organizations: The development of generalized innovation culture using exploratory factor analysis, *European Journal of Innovation Management*, Vol.11 (4)
27. Dove, R. (2009), KMresponse ability, and the agile enterprise, *Journal of knowledge management*, 40 (3)
28. Doyle, P. (2008), Innovate or die, *Marketing Business*. 20(4).
29. Drucker, P. F.(2003), *Post –capital society*, Harper and Collins, New York
30. Gold, A.H., Malhotra, A & Segars, A.H.(2001). Knowledge management: an organizational capabilities perspective. *Journal of Management Information Systems*, vol. 18, no. 1, pp. 185-214.
31. 185-214.
32. Grant, R.M. (1997) The knowledge-based view of the firm: Implications for management practice. *Long Range Planning*, Vol 30, No 3, pp. 450–454.
33. Ellonen, H.-K.; Wikstrom, P; and Jantunen, A. (2009). Linking dynamic capability portfolios and innovation outcomes. *Technovation*, doi: 10.1016/j.technovation.04.005.

34. Fadhilah, M. (2020). Knowledge Management Practice For Competitive Advantage Through Innovation. *International Journal of Business and Management Invention*, Volume 9 Issue 7, PP—01-05.
35. Furrer, O, Thomas, H&Goussevskaia, A. (2008). The structure and evolution of the strategic management field: a content analysis of 26 years of strategic management research. *Inteiuational Journal of Management Reviews*, vol.10, no.1, pp. 1-23. Heinemann Nonaka, I. (2001). The knowledge creating company. *Harvard Business Review*.96-104.
36. Heisig, P. (2014). Harmonisation of Knowledge Management – Comparing 160 Km Frameworks around the Globe. *Journal of Knowledge Management*, 13(7), 4-31.
37. Hitt, M.A., Ireland, R. D., &Hoskisson, R. E., (1995). *Strategic Management Competitiveness and Globalization*, Annotated Instructor's Edition.
38. Hofer, C.W. & Schendel, D.(1978). *Strategy Formulation: Analytical Concepts*. St. Paul, MN: West.
39. Hussey, David. (1999). Igor Ansoff's continuing contribution to strategic management. *Strategic Change*. 8. 375-392. 10.1002/(SICI)1099-1697(199911)8:73.0.CO;2-U.
40. Lee, S. C./Chang, S. N./Liu, C. Y. /Yang, J. 2007. The Effect of Knowledge Protection, Knowledge Ambiguity, And Relational Capital On Alliance Performance. *Knowledge And Process Mgmt*, 14, 58-69.
41. Li, S., Nathan, R., & Rao, S. (2006). The impact of supply chain management practices on competitive advantage and organizational performance. *Omega*. 2006; 34:107-124.
42. Jackson, S.E., Hitt, M.A,&DeNisi, A.S.(2003). Managing knowledge for sustained competitive advantage: designing strategies for effective human resource management', in N Schmitt(eds), *The Organizational Frontiers*, 1st edn, Jossey-Bass, San Francisco, p.452.
43. Jacome, R, Lisboa, J. &Yasin, M.(2002). Time-based differentiation - an old strategic hat or an effective strategic choice: an empirical investigation. *European Business Review*, vol. 14, no. 3, pp. 184-93.
44. Jennex, M. Durcikova, A. (2013). Assessing Knowledge Loss Risk. 46TH Hawaii International Conference on System Sciences, Hicss46, Hawaii. Ieee Computer Society.
45. John Wiley Ogara, W.O., Jalang'o, J.W.&Othieno, O.J. (2010). Knowledge management & institutional framework: Kenyan veterinary services. *Journal of Knowledge Management Practices*,11(3)
46. Kassa, M. (2017). Review on environmental effects of ethiopian floriculture industry. *Asian Research Journal of Agriculture*, 4(2), 1-13.
47. Kianto, A. (2011). The influence of knowledge management on continuous innovation, Forthcoming publication in *International Journal of Technology Management*.
48. KIPPPRA. (2010). Kenya economic report 2010: enhancing sectoral contribution towards reducing poverty, unemployment and inequality in Kenya. Nairobi
49. Kotorov,R., &Hsu,E.(2001). A model for enterprise portal management. *Journal of Knowledge management*. 5 (1),
50. Kroll, M., Wright, P., and Heiens, R.A. (1999). The Contribution of Product Quality to Competitive Advantage: Impacts on Systematic Variance and Unexplained Variance in Returns. *Strategic Management Journal*, 20(4): p. 375-384.
51. Lakhali, L. (2009). Impact of Quality on Competitive Advantage and Organizational Performance. *The Journal of the Operational Research Society*, 60(5): p. 637-645.
52. Lee, M. and Chang, S. (2008). The linkage between knowledge accumulation capability and organizational innovation. *Journal of knowledge management*, 1 (12).
53. Lee, C.C., & Yang, J. (2000). Knowledge value chain. *Journal of management development*. 19(9)
54. Lee, H & Suh, Y. (2003). Knowledge conversion with information technology of Korean Companies. *Business Process Management Journal*, vol. 9, no. 3, pp. 317-36.
55. Ling, W.C., Sandhu,M, &Jain,K. (2009). Knowledge sharing in an American multinational company based in Malaysia. *Journal of Workplace Learning*. 21 (2)
56. Lubit, R. (2001). Tacit knowledge and knowledge management: the keys sustainable competitive advantage. *Organizational dynamics*. 29 (3).
57. Massa, S.&Testa, S.(2009). A knowledge management approach to organizational competitive advantage: Evidence from the food sector', *European Management Journal*, vol. 27, no. 2, pp. 129-41.
58. Maingi, N, N. (2007). Knowledge management in a competitive economy: the knowledge management readiness score (KMS). Retrieved from <http://www.strathmore.edu/news/knowledge-mngt.php>
59. Meyer, J.N., & Rowan, B. (2007). Institutionalized organizations: Formal structures as myth and ceremony. *American Journal of Psychology*, 7(83).

60. Miles, R.E., & Snow, C.C. (1978). *Firm's Strategy, Structure and Process*. New York: McGraw Hill.
61. Mills, A.M., & Smith, T.A. (2011). Knowledge management and organizational performance: a decomposed view. *Journal of Knowledge Management*. 15 (1)
62. Mosoti, Z., & Masheka, B. (2010). Knowledge management: the case for Kenya. *The journal of language, technology & Entrepreneurship in Africa*. 2 (1)
63. Muganda-Ochara, N et al, (2008). Assessing the application of the knowledge management success paradigm in South Africa. *Communications of the IBIMA*.
64. Nkemfufu, A., Felix, N., & Asah, N. (2019). Innovation practices for sustainable competitive advantage. *European Journal of Business and Innovation Research*, Vol 7, No. 3, pp 48-67.
65. Nonaka, I., Toyama, R. and Konno, N. (2000). SECI, ba and leadership: a unified model of dynamic knowledge creation. *Long Range Planning*, Vol. 33 No. 1, pp. 5-34.
66. Naresian, L. (2019). *Competitive Strategies and performance of flower exporters in Kenya*. University of Nairobi, Kenya.
67. Nielsen, A.P. (2006). Understanding dynamic capabilities through knowledge management. *Journal of Knowledge Management*, vol. 10, no. 4, pp. 59-71.
68. Nonaka, I., & Takeuchi, H. (1995). *The Knowledge-creating Company: How Japanese Companies Create the Dynamics of Innovation*. Oxford University Press, Oxford.
69. Ogbo, Ann & Ezeobi, Jesse & Ugbam, Charles & Okeke, Obinna & Kalu, Ebere. (2019). The Management Challenge of Sustaining Competitive Advantage through Innovation in Nigerian Business Environment. *Journal of Economics, Management and Trade*. 24. 1-13. 10.9734/JEMT/2019/v24i130153.
70. O'Dell, C., & Hubert, C. (2011). *The New Edge in Knowledge: How Knowledge Management Is Changing the Way We Do Business*. USA:
71. Pearce II, J.A. & Robinson, J. R.B. (1994). *Strategic Management: Formulation, Implementation and Control*. Irwin, Burr Rigde, IL.
72. Pentland, B.T. (1995). Information systems and organizational learning: the social epistemology of organizational knowledge systems', *Accounting, Management & Information Technology*, vol. 5, no. 1, pp. 1-21.
73. Peteraf, M.A. (1993). The cornerstones of competitive advantage: a resource-based view. *Strategic Management Journal*, vol. 14, no. 3, p. 179-91.
74. Piotrowski, P. (2008). Knowledge base views. 1-4. 10.1109/INFTECH.2008.4621585.
75. Porter, M.E. (1985). *Competitive Advantage: Creating and Sustaining Superior Performance*. Free Press, New York.
76. Porter, M. E., (1980). *Competitive Strategy: Techniques for Analyzing Industries and Competitors*, New York, Free Press
77. Rolland, N & Stanley, T. (2007). Achieving best practices transfer across countries. *Journal of Knowledge Management*. Vol 11(3)
78. Ray, L.L. (2008). Requirement for knowledge management: business driving information technology. *Journal of knowledge management*. Vol 12 (3),
79. Riege, A. (2005). Tree-Dozen knowledge sharing barriers managers must consider. *Journal of knowledge management*. Vol 9 (3)
80. Sanchez, S., & Palacios M. (2008). Knowledge-based manufacturing enterprises: evidence from a case study. *Journal of manufacturing technology management*. Vol 19 (4),
81. Sandhawalia, B. Dalcher, D. (2011). Developing knowledge management capabilities: a structured approach. *Journal of Knowledge Management*. Vol 15 (2)
82. Silvi, R., & Cuganesan, S. (2006). Investigating the management of knowledge for competitive advantage. *Journal of Intellectual Capital*. Vol 7 (3)
83. Soyer, Ayberk & Erkut, Haluk. (2008). Developing a competitive advantage model for organizations (in Turkish). 7.
84. Takeuchi, H. & Nonaka, I. (2004). *Knowledge Management*. John Wiley: Singapore.
85. Thatte, A. (2007). *Competitive advantage of a firm through supply chain responsiveness and SCM practices*, Doctoral dissertation, The University of Toledo.
86. Thompson V.A. (1965). Bureaucracy and Innovation. *Administrative Science Quarterly*, 10(1)
87. Tippins, M. J., & Sohi, R. S. (2003). IT competency and firm performance: is organizational learning a missing link? *Strategic Management Journal*, 24(8) 745-761
88. Tsai, W. (2001) Knowledge transfer in intra organizational networks: effects of network position and

- absorptive capacity on business unit innovation and performance. *Academy of Management Journal*, 44, 998–1004.
89. Tushman, M.L., O'Reilly, C.A., III. (2007). *Winning Through Innovation: A Practical Guide to Leading Organizational Change and Renewal*. Harvard Business School Press, Boston.
 90. Van de Ven, A. H. (1986). Central problems in the management of innovation. *Management science*, 32(5).
 91. Von Krogh, G. (2012). How Does Social Software Change Knowledge Management? Toward A Strategic Research Agenda. *The Journal of Strategic Information Systems*, 21, 154-164
 92. Walters, D, Halliday, M & Glaser, S. (2002). Creating value in the new economy. *Management Decision*, vol. 40, no. 7/8, p. 775-81.
 93. Wang, C. L., & Ahmed, P. K. (2004). The development and validation of the organizational innovativeness construct using confirmatory factor analysis. *European Journal of Innovation Management*, 7(4).
 94. Wilson, G. (2007). Knowledge, innovation and re-inventing technical assistance for development. *Progress in Development Studies*, 7(3).
 95. Woods, A (Eds). *The knowledge management* (2001). Boston, MA: Butterworth- Personal knowledge: Towards a post-critical philosophy. Chicago: University of Chicago Press
 96. Yli Renko, H., Autio, E., & Sapienza, H. J. (2001). Social capital, knowledge acquisition, and knowledge exploitation in young technology-based firms. *Strategic Management Journal*, 22(6 7).
 97. Zaltman, G., Duncan, R. & Holbek, J. (1973), *Innovations and Organizations*, Wiley, New York, NY.